BUTTE COUNTY AIR QUALITY MANAGEMENT DISTRICT

2525 DOMINIC DRIVE, SUITE J CHICO, CALIFORNIA 95928 TELEPHONE: (530) 891-2882 FAX: (530) 891-2878

TITLE V OPERATING PERMIT

ISSUED TO:

Pacific Oroville Power, Inc. 3050 South 5th Avenue Oroville. CA 95965

PLANT SITE LOCATION:

Pacific Oroville Power, Inc. 3050 South 5th Avenue Oroville, CA 95965

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Lawrence Odle, Air Pollution Control Officer	Date

EFFECTIVE November 1, 2000

EXPIRATION October 31, 2005

Nature of Business:

APPLICATION COMPLETENESS DATE:

SIC CODE:

Responsible Official: Name: James Klemes

Title: Vice President of Operations

Phone: (703) 246-0471

Power Production

12/1/95 4911

Site Contact Person:

Name: Gary Leonard Title: Plant Manager Phone: (530) 532-0597

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I. FACILITY EMISSION UNITS AND EQUIPMENT LISTS:

A. Insignificant Emissions Units

- The equipment listed in Table 1 are not required to obtain an operating permit pursuant to Butte County Air Quality Management District (AQMD) regulations and/or do no have actual emissions actual emissions above deminimus threshold levels (i.e. 4000 pounds per year of criteria pollutants or 1000 pounds per year of hazardous air pollutants) and are hereby listed as insignificant emissions units. The equipment listed in Table 1 may be supplemented, replaced or modified without notice provided the operating status has not changed as defined in current district or federal rules.
- 2. Insignificant emissions units shall comply at all times with the generally applicable requirements identified in Section IV.A of this permit.

Table 1. Insignificant Emissions Units (partial listing)

Description	Capacity	Basis
Solvent cleaning tank (Safety Kleen)	40 gallon	actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants
Turbine lube oil tanks	N/A	actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants
Cooling Towers Cl ₂ biofoul additive 30 lb/day, no chromium compounds.	20,000 gal/min	actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants
Repairs and maintenance operations.	N/A	actual emissions are expected to be less than 4000 pounds per year of criteria pollutants and/or 1000 pounds per year of hazardous air pollutants

B. Significant Emissions Unit Information

Each of the sources in Table 2 has been constructed pursuant to issuance of an authority to construct permit in accordance with District Rules 402 and 430.

Table 2. Significant permitted sources at Pacific Oroville Power, Inc.

Source	Permit #	Description	Model	Capacity
#				
S-1	POP-85-01	2-Zurn boilers, stationary grate biomass-	Zurn VC	22 MW
	NSR 4-4-4,	fired controlled by multiclone and ESP.		350 MMBtu/hour
	SAC 83-02			220,000 lb/hour
S-2	POP-85-01	Fugitive emissions: Fuel material	N/A	
		receiving, conveying, handling, and		
		storage areas, ash handling equipment,		
		unpaved roadways and facility		
		maintenance materials and equipment.		
S-3	POP-89-02	Diesel I.C. Engine Power Generator 130	CAT 3412	130 HP, 131 KVA
		KVA		
S-4	POP-89-02	Diesel Storage tank	N/A	10,000 gallons
S-5	POP-88-03	6,000 Gallon Above Ground Gasoline	N/A	6000 gallons
		Storage Tank with Phase I 2-Point Vapor		
		Recovery and One (1) Nozzle		
S-6	POP-98-04	Green waste receiving, processing	See	21 BDT/hour
		storage and handling1	footnote 1	

C. Air Pollution Control Equipment

- 1. The owner or operator (permittee) shall install, maintain, and continuously operate during the combustion process, a separate electrostatic precipitator (ESP) servicing each of the two wood-fired boilers. Prior to being vented to the atmosphere, all exhaust gases from the respective boilers shall be directed through a cyclone type dust collector (multiclone) and then vented through an ESP. (PSD IX. A.1.)
- 2. Best Available Control Technology (BACT) is required to be installed and operated on significant emissions units. Table 3 lists the control equipment and the operating practices that constitute BACT as required by application of Rule 430 New Source Review.

¹ One (1) Morbark 1100 Tub-Grinder (M1) powered by One (1) Caterpillar Diesel-Fired Engine, Model 3408B, with Turbocharger and After-cooler for Control of Oxides of Nitrogen; One (1) Morbark 1100 Tub-Grinder (M2) powered by One (1) Caterpillar Diesel-Fired Engine, Model 3408B, with Turbocharger and After-cooler for Control of Oxides of Nitrogen; and One (1) Morbark 6036 Chipper powered by One (1) Caterpillar Diesel-Fired Engine, Model 3408B, with Turbocharger and After-cooler for Control of Oxides of Nitrogen

Table 3. Emission Control Equipment List

S#	Permit #	Unit Description	Control Equipment/ Work Practice
			Requirements
S-1	POP-85-01	2-Zurn boilers, stationary grate biomass-fired	Multiclone with ash reinjection system, Electrostatic Precipitator (ESP), and Combustion air controls (per boiler)
S-2	POP-85-01	Fugitive emissions: Fuel material receiving, conveying, handling and storage, ash handling, unpaved roadways and facility maintenance.	Fugitive emissions control practices: Minimizing material free-fall distances, exterior cleaning procedures, application of dust surfactants.
S-3	POP-89-02	Diesel I.C. Engine Power Generator 130 KVA	Low sulfur fuel.
S-4	POP-89-02	Diesel Storage Tank	None Required
S-5	POP-88-03	6,000 Gallon Above Ground Gasoline Storage Tank with One (1) Nozzle	CARB certified Phase I, 2-Point Vapor Recovery (EBW installed).
S-6	POP-98-04	Green waste receiving, processing, storage and handling.	Low sulfur fuel, Turbocharger and after- cooler on ICE's, and fugitive emissions control practices.

II. ADMINISTRATIVE REQUIREMENTS AND CONDITIONS

A. Permit Term and Renewal

- 1. This permit to operate shall be valid for a term of five years from the date of issuance. [Rule 1101 §6.2.15., 40 CFR §70.6(a)(2)]
- 2. The permittee shall submit a standard District application for renewal of this Title V permit to the permitting authority (APCO), no earlier than eighteen (18) months and no later than six (6) months before the expiration date of the current permit to operate. Permits to operate for all emissions units at a stationary source shall undergo simultaneous review. [Rule 1101 §4.2.2, 40 CFR §70.5(a)(1)(iii)]
- 3. Provided a complete and timely application has been submitted, this permit shall not expire until the renewal permit has been issued or denied and any permit shield contained herein pursuant to 40 CFR §70.6(f) shall extend beyond the original permit term until the renewal permit has been issued or denied. [40 CFR §70.4(b)(10)]

B. Permit Reopening and Revision

- 1. For any correction or amendment to this permit, or for any change to the facility or its operation which requires an amendment to this permit, the permittee shall comply with the Administrative Procedures for Sources in accordance with the applicable sections of District Rule 1101.
- No person shall cause or permit the construction or modification of any new source of air contaminants without first obtaining an Authority to Construct from the Air Pollution Control Officer as to the location and design of such new source to comply with applicable Rules and Regulations and ambient air quality standards of the District. The Air Pollution Control Officer shall not approve such construction or modification unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the new source can be expected to comply with all applicable state laws and District Rules and Regulations [Rule 401].
- 3. Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain written authorization for such construction from the Air Pollution Control Officer. An Authority to Construct shall remain in effect until a permit to operate the equipment for which the application was filed is granted or denied or the application is canceled. [Rule 402]
- 4. In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency. [PSD VI]

C. Payment of fees

The permittee shall pay annual fees in accordance with Rule 500 (Stationary Source Permit Fees), Rule 505 (Title V Fees), and Rule 506 (Air Toxic "Hot Spots" Fees). Total fees shall not exceed an overall fee rate of \$25.00 per ton of actual emissions, CPI adjusted to base year 1989 and calculated in accordance with Rule 505, paragraph 3. [Rule 505, 40 CFR §70.9(b)(i)]

D. Right of Entry

The APCO, the Executive Officer of the California Air Resources Board, the EPA Regional Administrator and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

- 1. To enter upon the premises where the emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and,
- 2. To have access to and copy any records required to be kept under terms and conditions of this permit; and,
- To inspect any equipment, work practices, operations, or emissions related activity at the facility; and,
- 4. To obtain samples from the emission source or require samples to be taken. [Rule 1101 §4.10, 40 CFR §70.6(c)(2)]

E. Severability

The provisions of this permit are severable; if any provision of this permit to operate is held invalid, such finding shall not affect the validity or enforcement of the remaining provisions. [POP-85-01 #10, Rule 1101 §6.2.13, 40 CFR §70.6(a)(5)]

F. Compliance

- 1. The permittee shall comply with all provisions of this permit. Non-compliance with the requirements specified in this permit, in whole or in part, constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial for a permit renewal application. [Rule 1101 §6.2.11.1 & .3, 40 CFR §70.6(a)(6)(i)]
- 2. This permit does not convey property rights or exclusive privilege of any sort. [Rule 1101 §6.2.11.2, 40 CFR §70.6(a)(6)(iii)]
- 3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Rule 1101 §6.11.4, 40 CFR §70.6(a)(6)(ii)]
- 4. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in Rule 1101 §5.8 and 40 CFR §70.7(f). The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Rule 1101 §6.11.5, 40 CFR §70.6(a)(6)(iii)]
- 5. The permittee shall furnish, within a reasonable time, any and all information that the APCO or the Regional Administrator may request, in writing, to determine whether or not cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit, or whether or not cause exists for a permit or enforcement action. Upon written request, within a reasonable time period, the permittee shall also furnish to the APCO or Regional Administrator copies of all records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality. [Rule 1101 §6.11.6, 40 CFR §70.6(a)(6)(v)]

G. Emergency Provisions

1. Definition. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Rule 1101 §2.13, 40 CFR §70.6(g)(1)]

- 2. Effect of an emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the reporting requirements of conditions IX.B.1 and IX.B.2 of this permit are met. [Rule 275.C, 40 CFR §70.6(g)(2)]
- 3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a) An emergency occurred and that the permittee can identify the cause(s) of the emergency; and, [Rule 1101 §6.2.12.2.1 &.2]
 - b) The facility was at the time being properly operated; and, [Rule 1101 §6.2.12.2.3]
 - c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and, [Rule 1101 §6.2.12.2.4]
 - d) The permittee submitted notice of the emergency to the APCO and the Regional Administrator, within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. [Rule 275, Rule 1101 §6.2.12.2.5, 40 CFR §70.6(g)(3)]
- 4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof for establishing that an emergency occurred. [Rule 1101 §6.2.12.3, 40 CFR §70.6(g)(4)]

H. Permit Shield

- 1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements, and subsumed requirements incorporated into this permit, as of the date of permit issuance and identified herein at Table 4. [40 CFR §70.6(f)]
- 2. The permit shield provisions of 40 CFR §70.6(f) are hereby extended to all equipment listed in Tables 1 and 2 of this permit and to all terms and conditions and applicable requirements listed in this permit under each operating scenario. [40 CFR §70.6(a)(9)(ii), 40 CFR §70.6(f)]
- 3. The permit shield provisions shall apply to any permit amendments issued as a final action by the APCO. [(40 CFR §70.7(d)(4)]
- 4. The permit shield provisions shall apply upon final action taken by the APCO granting a request for an administrative permit amendment. [40 CFR §70.7(d)(4)]
- 5. The permit shield under §70.6(f) of this part shall not extend to minor permit modifications. [40 CFR §70.7(e)(2)(vi)]

Table 4. Permit Shield extended to subsumed requirements.

Requirement Citation	Subsumed by	At Condition(s) #
40 CFR §60.43b(c) PM	Rule 430 emissions	Permit Condition IV.B.5.
standard 0.1 lb/MMBtu	limitations 0.035 lb/MMBtu	
	(10.53 lb/hour @ 300 MMBtu)	
40 CFR §60.44b(d) NOx limits 0.3 lb/MMBtu.	Rule 430NSR: 0.14 lb/MMBtu (43.3 lb/hour @ 300 MMBtu)	Permit Condition IV.B.7. Note NOx is applicable only for NSR. NSPS limits are subsumed by more stringent NSR based limits.
40 CFR §60.46b (e),(3)) 30	Rule 430 NSR: Daily (24	Permit Condition IV.B.7.
day rolling average for NOx	hour) average limits.	

III. TITLE VI PROVISIONS

A. Stratospheric Ozone Protection

- The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.
 - b) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR §62.166. ("MVAC-like appliance" as defined in §82.152)
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166
- 2. If the permittee manufacturers, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 3. If the permittee performs a service on motor (fleet) vehicles when the service involves ozone-depleting substance refrigerant (or a regulated substitute substance) in the motor vehicle air conditioner, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- 4. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.

IV. EMISSION LIMITATIONS AND OPERATING REQUIREMENTS

A. Generally Applicable Requirements (Applicable to all emissions units)

Below is a list of generally applicable requirements that apply to all emissions units at the facility. The rules referenced below reflect requirements of Butte County Air Quality Management District Rules and Regulations that have been adopted into the District's State Implementation Plan.

- 1. **Rule 201 Nuisance:** No person shall discharge from any non-vehicular source such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. [Rule 201]
- 2. **Rule 202 Visible Emissions:** No person shall not discharge into the atmosphere from any single non-vehicular source of emissions whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
 - a) As dark or darker in shade as that designated as No. 2 (or 40% opacity) on the Ringelmann Chart, as published by the United States Bureau of Mines; or
 - b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a). [Rule 202]
- 3. **Rule 203 Particulate Matter Concentration:** A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions.
 - When the source involves a combustion process, the concentration must be calculated to 12 percent (12%) carbon dioxide (CO_2).
- 4. Rule 205 Process Weight Limitation: A person shall not discharge in any one hour from any source whatsoever dust or condensed fumes in total quantities in excess of amounts shown in the following table titled "Process Weight Limitation Table."

To use the following table, take the process weight per hour as defined in Rule 102 then find this figure on the table, opposite which is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one hour. Interpolation of the data in the table for process weights up to 60,000 pounds/hour shall be accomplished by use of the equation $E = 4.10(P^{0.67})$ and interpolation and extrapolation of the data for process rates in excess of 60,000 pounds/hour shall be accomplished by use of the equation $E = 55.0 (P^{0.11})$ -40. For purposes of these equations, $E = 0.0000 (P^{0.11})$ -40 and $E = 0.00000 (P^{0.11})$ -40 are the process weight rate in tons/hour.

PROCESS WEIGHT LIMITATION TABLE

Process Weight Rate		Maximum Discharge Rate	Process Weight Rate		Maximum Discharge Rate
lb/hr	ton/hr	lb/hr	lb/hr	ton/hr	lb/hr
100	0.05	00.551	14000	7.00	15.5
200	0.10	00.877	16000	8.00	16.5
400	0.20	01.400	18000	9.00	17.9
600	0.30	01.830	20000	10.00	19.2
800	0.40	02.220	30000	15.00	25.2

1000	0.50	02.580	40000	20.00	30.5
1500	0.75	03.380	50000	25.00	35.4
2000	1.00	04.100	60000	30.00	40.0
2500	1.25	04.760	70000	35.00	41.3
3000	1.50	05.380	80000	40.00	42.5
3500	1.75	05.970	90000	45.00	43.6
4000	2.00	06.520	100000	50.00	44.6
5000	2.50	07.580	120000	60.00	46.3
6000	3.00	08.560	140000	70.00	47.8
7000	3.50	09.490	160000	80.00	49.0
8000	4.00	10.400	200000	100.00	51.2
9000	4.50	11.200	1000000	500.00	69.0
10000	5.00	12.000	2000000	1000.00	77.6
12000	6.00	13.600	6000000	3000.00	92.7

5. Rule 210 Phase I Vapor Recovery Requirements

a) Phase I Storage Tanks

No owner or operator shall transfer, permit the transfer, or provide equipment for the transfer of gasoline, unless an ARB-certified Phase I vapor recovery system is installed on the stationary storage tank and used during the transfer.

b) **Exemptions to Rule 210A:**

- Small Tanks A gasoline storage tank with a capacity of less than one cubic meter (260 gallons) located at a retail service station or a tank of 550 gallons or less at all other locations. All small tanks exempted by this rule shall install a submerged fill pipe when originally installed or relocated.
- 2. **Agricultural Tanks** A gasoline storage tank used the majority of the time for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code.
- 3. **Facilities with < 25,000 Gallon Monthly Throughput** A gasoline storage facility installed prior to August 7, 1979 for which the total monthly throughput of the facility continues to not exceed twenty-five thousand (25,000) gallons.
- 4. **Tanks With an Offset Fill Pipe** An underground gasoline storage tank installed prior to August 7, 1979 which is equipped with an offset fill pipe.

c) Tank Installation

At the time of tank installation, an ARB-certified Phase I vapor recovery system shall be installed and used thereafter on all tanks at the facility unless exempted from the Phase I requirement pursuant to Rule 210.B.1. or 210.B.2.

d) Prohibition of Use of Defective Gasoline Storage Tank or Phase I Equipment

Whenever the Air Pollution Control Officer or his designee determines that a gasoline storage tank, Phase I vapor recovery system, or any component thereof contains a defect, the Air Pollution Control Officer or his designee shall mark such system or component "Out of Order". No person shall use or permit the use of such marked

component or system until it has been repaired, replaced, or adjusted as required to permit proper operation, and the Air Pollution Control Officer or his designee has reinspected it or has authorized its use pending reinspection.

6. Rule 212 Delivery Vehicles Equipped With Vapor Recovery

- a) Loading Requirements No owner or operator of any vapor recovery equipped gasoline delivery vessel shall load, permit the loading, or provide equipment for the loading of gasoline into such a vessel unless an ARB-certified vapor recovery system or its equivalent, approved by the Air Pollution Control Officer, is used during the transfer.
- b) **Unloading Requirements** The owner or operator of any vapor recovery equipped gasoline delivery vessel shall, when unloading gasoline to any Phase I equipped storage tank, use an ARB-certified Phase I vapor recovery system or its equivalent as approved by the Air Pollution Control Officer.
- c) Vapor-Tight Requirements No person shall store gasoline in or otherwise use or operate any gasoline delivery vessel unless such vessel is designed and maintained to be vapor-tight. A person shall not allow loading or unloading of gasoline, or other use or operation of any vapor recovery equipped transporting vessel unless the vessel has proof of a valid certification of vapor integrity as defined by the applicable Air Resources Board Certification and Test Procedures, pursuant to Health and Safety Code Section 41962(g) and the California Code of Regulations Title 17, Section 94004.
- 7. **Rule 225 Solvent Storage:** All paints and solvents shall be stored in sealed containers when not in use. Any containers of solvent stored in Butte County which exceed fifty-five (55) gallon capacity shall contain instructions to store in a closed condition.
- 8. **Rule 230 Reduced Sulfur Emission Standards:** It shall be unlawful for any person to cause or permit the emission of air contaminants from any premises which will result in ground-level concentrations of TRS (total reduced sulfur), expressed as hydrogen sulfide, in excess of 0.03 PPM for a period of sixty (60) minutes.
- 9. **Rule 231 Sulfur Oxides Emission Standard:** No person shall discharge into the atmosphere from any single source of emission whatsoever any sulfur oxides in excess of 0.2 percent by volume (2000 PPM) collectively calculated as sulfur dioxide (SO₂).

10. Rule 241 - Cutback and Emulsified Asphalt

- a) **General**
- Purpose The purpose of this rule is to limit emissions of volatile organic compounds (VOCs) from the use of cutback and emulsified asphalt in paving, construction, or maintenance of parking lots, driveways, streets, and highways.
- 2. <u>Exemption</u> The provisions of this rule shall not apply to the use of cutback and emulsified asphalt sold in Butte County for shipment and use outside of Butte County.
- b) **Definitions** For the purposes of this rule, the following definitions shall apply:

Asphalt means a brownish-black cementitious material (solid, semi-solid, or liquid mixture) of which the main constituents are bitumens which occur naturally or are obtained by distillation from coal or petroleum.

Cutback asphalt means paving-grade asphalt liquified with petroleum distillate and as further

defined by American Society for Testing and Materials (ASTM) specifications as follows:

Rapid Cure Type ASTM D2028 Medium Cure Type ASTM D2027 Slow Cure Type ASTM D2026

Emulsified asphalt means any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anionic and cationic types.

c) Requirements

- 1. <u>Cutback Asphalt</u> A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets, or highways any:
 - a. Rapid or medium cure cutback asphalt; and
 - b. Slow cure cutback asphalt containing more than 0.5% by volume of VOCs which evaporate at 260°C (500°F) or lower as determined by ASTM Method D402-76.
- 2. <u>Emulsified Asphalt</u> A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets, or highways any emulsified asphalt material containing more than 3.0% by volume of VOCs which evaporate at 260°C (500°F) or lower as determined by ASTM Method D244-91.

d) Recordkeeping

Any person who sells, offers for sale, uses or applies for paving, construction or maintenance of parking lots, driveways, streets or highways any asphalt material subject to this rule shall maintain a current list of all asphalt materials in use and Material Safety Data Sheets (MSDSs) or manufacturer specifications for each asphalt material containing sufficient information to readily determine compliance with Section C of this rule, as applicable. These records shall be kept on site for at least three (3) years and be made available to the District upon request.

- 11. **Rule 250 Circumvention:** No person shall build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California or Rule 201. Nuisance, of these Rules and Regulations.
- 12. **Rule 260 Separation of Emissions:** If air contaminants from a single source operation are emitted through two or more emission points, the total emitted quantity of any air contaminant limited by these (BCAQMD) Rules and Regulations shall not exceed the quantity which would be the allowable emission through a single emission point, and the total emitted quantity of any such air contaminant shall be taken as the product of the highest concentration measured in any of the emission points and the combined exhaust gas volume from all emission points, unless the person responsible for the source operation establishes, to the satisfaction of the Air Pollution Control Officer, the correct total emitted quantity.

13. Rule 261 Combination of Emissions

a) If air contaminants from two or more source operations are combined prior to emission and there are adequate and reliable means reasonably susceptible to confirmation and use by the Air Pollution Control Officer for establishing a separation of the components of the combined emission to indicate the nature, extent, quantity and degree of emission

- arising from each such source operation, then all of the applicable prohibitions contained in these Rules and Regulations shall apply to each such source operation separately.
- b) If air contaminants from two or more source operations are combined prior to emission, and the combined emissions cannot be separated according to the provisions of Part A of this section, then all of the applicable prohibitions contained in these Rules and Regulations shall be applied to the combined emission as if it originated in a single source operation.
- 14. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §60.11(d), NSR permits]
- 15. The permittee shall comply with the requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects. [40 CFR Part 60, Subpart M]
- 16. Operation of this equipment listed on this permit must be conducted in compliance with all data and specifications submitted with all applications under which this permit is issued. [POP-85-01 #2]

B. Boilers (S-1)

- 1. The permittee shall not discharge or cause the discharge into the atmosphere from the boiler stack, emissions that exceed the limits in this section. Methods and procedures for performance source testing and continuous monitoring are detailed in Sections VI.C and VI.B, respectively, of this permit. Reference methods cited herein are incorporated by reference to Appendix A of 40 CFR Part 60, and Appendix M of 40 CFR Part 51.
- 2. Startup and shutdown are defined in 40 CFR §60.2. The boilers can be presumed to be in startup or shutdown mode if the CO₂ concentration in the exhaust gas is less that 12% based upon a six-minute rolling average calculated each minute.
- 3. Except as noted in sections IV.B.3.a and IV.B.3.b below, the stack emissions, including emissions resulting from the condensation of pollutants after exiting the stack, shall not exceed ten (10) percent opacity (Ringelmann ½) for a period or periods aggregating more than three (3) minutes in any one (1) hour as determined by the continuous opacity monitor or EPA Method 9: [POP-85-01 #35.a]
 - a) Start-up/Shutdown Conditions: During start-up and shutdown, the equipment shall not exceed 40% opacity (Ringelmann 2) for a period or periods aggregating more than three (3) minutes in any one (1) hour. Start-up shall be accomplished pursuant to condition IV.B.10 of this permit. The boiler(s) shall be presumed to be in start-up or shutdown mode if the average Carbon Dioxide (CO₂) concentration in the exhaust gas is less than 12% (six-minute rolling average calculated each minute).; and, [POP-85-01 #35.b]
 - b) Maintenance Conditions: Temporary interruptions in fuel feed to a boiler to allow the grates to be cleaned shall be considered a start-up/shutdown condition, provided that the operational status of the boiler is recorded prior to any measured opacity excursions. Start-up of a cell may commence immediately upon completion of the grate cleaning. [POP-85-01 #35.c]
- 4. Except as noted in sections IV.B.4.a, IV.B.4.b, and IV.B.4.c below, the permittee shall not discharge, or cause the discharge into the atmosphere from the ESP stack gasses which would exhibit greater than 10 percent opacity, except for one 6-minute period per hour of not more than 15 percent opacity. At all other times when one or more boilers are operating the opacity shall not exceed:

- a) 20 percent during periods when one boiler is operating under normal conditions and the second boiler is in either startup or shutdown. This operating mode is defined as "Mode A." [PSD IX.D.1.a]
- b) 40 percent during periods when one boiler is undergoing startup or shutdown and the other boiler is not operating (i.e., cold). This operating mode is defined as "Mode B." [PSD IX.D.1.b]
- c) 20 percent during periods of grate cleaning, except for one 6-minute period per hour of not more than 27 percent opacity. [PSD IX.D]

The opacity limitations in this condition shall be based upon a six-minute rolling average calculated each minute. Startup and shutdown are defined in 40 CFR §60.2 and the boilers can be presumed to be in startup or shutdown mode if the CO₂ concentration in the exhaust gas is less that 12% based upon a six-minute rolling average calculated each minute. [POP-85-01 #36, PSD IX.D. and IX.F., 40 CFR §60.11(c), §60.43b(f), (g)]

5. Particulate emissions from the boiler stack shall be limited to the following concentration and rate:

Particulate Matter 0.014 gr/dscf 10.53 lb/hr

Limits stated represent an average of data as provided by the source performance tests conducted in accordance with condition VI.C.4 of this permit. All emission concentration and rate limits are calculated on a dry basis. The emission concentration limits are corrected to 12% Carbon Dioxide (CO_2) . [POP-85-01 #37, PSD IV. D, 40 CFR §60.43b(c) subsumed]

6. Total hydrocarbon emissions from the boiler stack, calculated as methane, shall be limited to the following concentration and rate:

Total Hydrocarbons (HC) (Calculated as Methane)

102.00 ppm 22.32 lb/hr

Limits stated represent an average of data as provided by the source performance tests conducted in accordance with condition VI.C.1 of this permit. All emission concentration and rate limits are calculated on a dry basis. The emission concentration limits are corrected to 12% Carbon Dioxide (CO_2) . [POP-85-01 #37; PSD IX.E.1]

- 7. Boiler stack emissions of Nitrogen oxides (NOx), as NO₂, shall not exceed 43.30 lbs/hour or 73.00 parts per million (ppm) based on continuous monitoring (24-hour rolling average, calculated hourly). Performance testing for NOx may be satisfied by performing a Relative Accuracy Test Audit (RATA) in accordance with Appendix F to 40 CFR Part 60 or by a source test using RM 7E. [POP-85-01 #36 and #49, PSD IV.D, 40 CFR §60.44b(d) not applicable]
- 8. Boiler stack emissions of Carbon monoxide (CO) shall not exceed 663.60 lbs/hour or 1732.00 ppm based on continuous monitoring (24-hour rolling average, calculated hourly). Performance testing for CO may be satisfied by performing a Relative Accuracy Test Audit (RATA) in accordance with Appendix F to 40 CFR Part 60 or by a source test using RM 10. [POP-85-01 #36 and #49]
- 9. During periods of startup and shutdown, as defined in section IV.B.2, only the mass emission limitations of conditions IV.B.7 and IV.B.8, and opacity limits of conditions IV.B.3.a, IV.B.4.a, and IV.B.4.b shall apply. [POP-85-01 #35.b, PSD IX.D.1 and IX.D.2]
- 10. Startup of the facility shall be accomplished by firing one steam generator at a time. The second steam generator shall not be fired until the first steam generator has completed start-up ad defined in 40 CFR §60.2 (i.e. if the CO₂ concentration in the exhaust gas is greater than or equal to 12% based upon a six-minute rolling average calculated each minute). [POP-85-01 #27 and #36]

- 11. Permittee shall not exceed a combined steam production rate of 220,000 pounds per hour. [POP-85-01 #24, PSD IX.B.]
- 12. The permittee shall fire only biomass fuel including wood, bark, wood residue, mill wastes, unpainted lumber, agricultural crop residues, orchard prunings and removals, stone fruit pits, nut shells, lawn yard and garden clippings and approved auxiliary fuel in the boilers as conditioned below. [POP-85-01 #26, PSD IX.C.1.]
 - a) The total urban woodwaste fuel use shall not exceed 30% by weight of the fuel pile mix on an annual basis as determined by the annual fuel purchase report. Urban woodwaste includes cardboard fiber cubes; and, [POP-85-01 #26.b]
 - b) The total of almond shells, walnut shells, olive pits, peach pits and prune pits shall not exceed 20% by weight of the total fuel mix on an annual basis as determined by the annual fuel purchase report; and, [POP-85-01 #26.c]
 - c) Foreign material shall not exceed 3% of the urban fuel mix. For the purposes of this condition, foreign material shall include tar paper, oil, plastics, Styrofoam, rubber, paint or any other type of non-biomass type material. The permittee shall specify in urban wood fuel contracts that foreign material shall not exceed 3% of the fuel mix. The permittee shall reject any deliveries of urban wood waste that appear to fail this condition. [POP-85-01 #26.d]
- 13. Additional biomass fuels may be administratively approved for use upon a written request by the owner or operator to add an unlisted fuel. Written requests to use alternative fuels shall be submitted to the APCO and Regional Administrator at least thirty (30) days prior to the proposed delivery and use of the additional fuel, and provided: [POP 85-01 #26.a, PSD IX.C.]
 - a) The permittee can provide evidence that the emissions of affected pollutants will not significantly increase; and,
 - b) The use of any alternative biomass fuels shall not stay any emission limitations, or operating requirements, of this permit; and,
 - c) The APCO or the Regional Administrator does not object within seven (7) days of the request; an objection shall identify the reason for the objection and shall identify any additional evidence required for approval including, but not limited to, emissions tests, calculations, or engineering analyses.

C. Fugitive Emissions (S-2, S-6)

- 1. Fugitive emissions, including but not limited to any of the following, shall be controlled at all times such that a public nuisance is not created at any point beyond the plant property lines: [POP-85-01 #31, POP-98-04 #31]
 - a) Dust from unpaved roads or any other non-vegetation-covered areas; and,
 - b) Fugitive sawdust from fuel-pile areas or fuel-handling devices; and,
 - c) Char and/or bottom ash which is processed by the ash handling system or is removed from the boiler by other means. Such ash shall be stored in such a manner so as to not create a public nuisance or excessive fugitive emissions; and,
 - d) All ash shall be transported in a <u>wet</u> condition in covered containers at all times. It shall be the responsibility of the plant owner/operator to insure that any and all contract or company carriers adhere to this condition.
- 2. All unpaved roadways and work areas shall have water or other dust suppressant applied as needed to minimize fugitive emissions during periods of elevated ambient temperatures, increased wind velocity, or low humidity. [POP-85-01 #31, POP-98-04 #31]

- 3. All outside surfaces, including but not limited to the main building, boilers, electrostatic precipitators, support pads, road areas, etc., shall be cleaned on a weekly basis or as necessary to prevent the buildup of ash and/or fugitive dust. [POP-85-01 #32, POP-98-04 #32]
- 4. In the event that any exposed surfaces become littered with fugitive dust emissions due to an upset condition, a cleaning procedure shall be implemented within four (4) hours following the upset to remove the fugitive debris. If the upset condition occurs at night, said surfaces shall be cleaned by 10:00 a.m. the following day. [POP-85-01 #33, POP-98-04 #33]
- 5. All transfer processes involving a free-fall of material in open areas shall be constructed and operated in such a manner as to minimize the free-fall distance and fugitive emissions. [POP-95-01 #30, POP-98-04 #34]

D. Standby Power Generator and Diesel Tank (S-3, S-4)

1. The subject equipment shall be fired exclusively on low sulfur fuel; the sulfur content shall not exceed 0.05 percent by weight. Any change in the type of fuel used shall first be reviewed and approved by the APCO. [POP-89-02 #25]

E. Gasoline Storage Tank 6000 gallon capacity (S-5)

- 1. A California Air Resources Board (CARB) certified Phase I vapor recovery system shall be used on all gasoline transfer operations. [Rule 210 A., POP-88-03 #25, CARB Executive Order G-70-97A for EBW vapor control]
- 2. The vapor recovery system shall operate in accordance with the manufacturer's specifications and maintained to be leak-free, vapor-tight, and in good working order. [POP-88-03 #26]
- 3. The District shall be notified within twenty-four (24) hours of detection of any soil contamination due to a product spill or equipment leak. Soil remediation measures may require an Authority to Construct and a Permit to Operate, as determined by the Air Pollution Control Officer. [POP-88-03 #27]

F. Greenwaste Operations (S-6)

- 1. The permit holder shall not operate more than one (1) tub-grinder or wood-chipper authorized by this permit at any time. [POP-98-04 #25]
- 2. The subject equipment shall be fired exclusively low sulfur fuel; the sulfur content of the fuel shall not exceed 0.05 percent by weight. Any change in the type of fuel used shall first be reviewed and approved by the District. [POP-98-04 #26]
- 3. Each tub-grinder and wood-chipper authorized for use subject to the requirements of this permit shall be equipped with Best Available Control Technology (BACT). BACT for each internal combustion engine is defined as turbocharged with an after-cooler for control of oxides of nitrogen. BACT for PM-10 from green-waste handling is defined at water-spray particulate control at each material transfer point, and minimization of all material free-fall distances to reduce entrainment of particulates into the ambient air. [POP-98-04 #27]
- 4. The subject equipment shall only be used to process green-waste that would otherwise be open burned. [POP-98-04 #28]
- 5. The permit holder shall maintain records of all green-waste processed by equipment operated under this permit on a daily basis. Such records shall include the type of waste processed and quantity, as bone dry tons. The permit holder shall record the daily fuel consumption of each internal combustion engine operated under this permit. All records shall be maintained on-site for a period of five (5) years and shall be made available for inspection by the APCO, or his designated representative, upon request. [POP-98-04 #29]
- 6. Gaseous and particulate emissions from each Caterpillar, Model 3408B, internal combustion engine shall not exceed the following mass emission rates:

Oxides of Nitrogen (as NO ₂)	8.00	Lb/hr
Carbon Monoxide (CO)	2.70	Lb/hr
Total Hydrocarbons (THC)	0.17	Lb/hr
particulates (PM-10)	0.49	Lb/hr

^{*} Values stated are those which represent an average of data as provided by the source performance tests. All values are calculated on a dry basis. [POP-98-04 #36]

7. Gaseous and particulate emissions from the Caterpillar, Model 3406B, internal combustion engine shall not exceed the following mass emission rates:

Oxides of Nitrogen (as NO ₂)	9.30	Lb/hr
Carbon Monoxide (CO)	0.87	Lb/hr
Total Hydrocarbons (THC)	0.18	Lb/hr
particulates (PM-10)	0.15	Lb/hr

^{*} Values stated are those which represent an average of data as provided by the source performance tests. All values are calculated on a dry basis.

G. Cooling Towers

1. The Permittee shall not use or allow the use of chromium containing compounds in the treatment of cooling tower circulating water. [POP-85-01 #29, Rule 1003, 40 CFR §63.400]

V. EMISSION OFFSETS

A. General Requirements

- 1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in the permit. [40 CFR §70.6(a)(8)]
- 2. In addition to emission offsets from biomass diverted from open burning in accordance with this permit, this facility may elect to obtain permanent emission reduction credits (ERCs) in accordance with the provisions of Rule 431. ERCs may be used as offsets and shall reduce by an equal amount the required offsets that must be continuously demonstrated through offset fuel purchases. Any ERC obtained or used under this section shall be subject to the administrative requirements of Rule 430 and Rule 431, if applicable. [Rules 430 and 431]

B. Greenwaste Emissions Offsets (S-6)

1. The permit holder shall obtain emission reduction credits sufficient to fully offset the calendar quarter increase in the Potential to Emit (PTE) from green waste fuel processing of oxides of nitrogen (NOx) and PM-10 (particulate matter with an aerodynamic diameter of 10 microns or less). The required offsets shall be obtained by using the equipment authorized under this permit to process green-waste that would otherwise be open burned in the Northern Sacramento Valley Air Basin. The hourly increase in the PTE (quantity of offsets required) and the total quantity of offsets generated through reductions in open burning are presented below: [POP-98-04 #30]

Pollutant	Increase in PTE (lb/hr)	Offset Ratio	Offset Requirements (Lb/Hr)	Offsets Created Through Reduced Open Burning (Lb/Hr)
NOx	9.30	2:1	18.6	56.26
PM-10	30.49	2:1	60.98	87.75

2. The offset requirements for NOx are based upon operation of the permitted equipment with the highest emission levels at the maximum rated capacity (NOx emissions from the Caterpillar model 3408B internal combustion engine). The offset requirements for PM-10 are based upon estimated emissions from products of combustion and fugitive emissions associated with greenwaste processing. Offset credits are based upon a green-waste processing rate of 15 bone dry tons per hour. Compliance with the hourly offset requirements shall be used as a surrogate to determine compliance with quarterly offset requirements.

VI. MONITORING AND PERFORMANCE TESTING

A. S-1 Sampling Facilities

- 1. The permittee shall provide all of the following: [POP-85-01 #44, PSD IX.E.5., 40 CFR §60.8(e)]
 - a) Safe sampling platform(s), and,
 - b) Safe access to sampling platform(s), and,
 - c) Utilities for sampling and testing equipment; and,
 - d) Sampling ports adequate for test methods applicable to such facility. This includes constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

B. S-1 Continuous Emission Monitoring

- 1. The permittee shall install, calibrate, maintain and operate the following continuous emissions monitoring systems (CEMS) to measure stack emissions and related process parameters at all times during the combustion process:
 - a) Stack gas Nitrous Oxide (NO) and Oxides of Nitrogen (NOx) monitor; and,
 - b) Stack gas Carbon Monoxide (CO) and Carbon Dioxide (CO2) monitor; and,
 - c) Stack gas Oxygen (O2) monitor, wet; and,
 - d) Stack gas Oxygen (O2) monitor, dry; and,
 - e) Stack gas flow monitor; and,
 - f) Stack gas opacity monitor; and,
 - g) Steam production-rate monitor

The CEMS shall meet the performance specifications in 40 CFR §60.13 and Appendix B to Part 60, Performance Specifications (PS) 1, 2, 3, 4 and 6. [POP-85-01 #38, PSD IX.F.1. 40 CFR §60.13, 60.48b(a), (d), §60.47b(a)]

- 2. All in-stack monitoring devices shall be routinely maintained for continuous on-line service in accordance with 40 CFR §60, Appendix B and F. [POP-85-01 #38]
- 3. Daily calibration and span checks shall be performed. Adjustments shall be made if the drift is greater than specified in 40 CFR §60, Appendix B, specification 2 (NOx), specification 3 (O2 and CO2), and specification 4 (CO). [POP-85-01 #38]
- 4. All gas cylinders used for daily calibration and span checks shall have a current, valid certification of concentration by the manufacturer. [POP-85-01 #38]
- 5. A Relative Accuracy Test Audit (RATA) of all CEMS used to measure the stack concentrations and mass emission rates of carbon monoxide(CO) and oxides of nitrogen (NOx) shall be conducted annually on or before September 1st of each calendar year, and shall be conducted at least once every four calendar quarters. The RATA for NOx monitors shall be conducted in accordance with 40 CFR §60, Appendix B, performance specification 2, section 7. The RATA for the O2 and CO2 monitors shall be conducted in accordance with 40 CFR §60, Appendix B, performance specification 3, section 3. The RATA for CO monitors shall be conducted in accordance with 40 CFR §60, Appendix B, performance specification 4, section 3. [POP-85-01 #49, PSD IX.E.3.]

- 6. The opacity monitor shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period and shall be connected to a data logging device or chart recorder capable of producing a printout of emissions. [POP-85 #37, PSD IX.F.1, 40 CFR §60.13(e)(1)]
- 7. The CEMS gas monitors shall complete a minimum of one cycle of operation (sampling, analyzing and data recording for each successive 15 minute period, be connected to a data logging device or chart recorder capable of producing a printout of 24-hour average mass emissions. [POP-85-01 #38, 40 CFR §60.13(e)(2)]
- 8. A quality assurance/quality control (QA/QC) program for the CEM system shall be developed and maintained. At a minimum, the plan shall conform to Appendix F to 40 CFR Part 60, including: [POP-85-01 #38, PSD IX.F.6]
 - a) Calibrations of CEMS; and,
 - b) Calibration Drift (CD) determination and adjustment of CEMS; and,
 - c) Preventive Maintenance of CEMS (including spare parts inventory); and,
 - d) Data recording, calculations, and reporting procedures; and,
 - e) Accuracy audit procedures including sampling and analysis methods; and
 - f) Program for corrective action for malfunctioning CEMS. [Appendix F to 40 CFR §60]

C. S-1 Performance Source Tests

- 1. Within 60 days after achieving the maximum production rate of the power generating facility, but no later than 180 days after initial start-up (as defined in 40 CFR §60.2) of the boilers and at such times as may be specified by EPA, the permittee shall conduct or cause to be conducted performance tests (as defined in 40 CFR §60.8) for particulate matter (PM), and hydrocarbons. A source performance test of the subject steam generators shall be conducted annually on or before September 1st of each calendar year. [POP-85-01 #41 & #47, PSD IX.E.1]
- A source performance test protocol shall be submitted to the APCO and U.S. EPA at least thirty (30) days prior to any compliance source testing. The permittee shall notify the APCO and U.S. EPA at least ten (10) days prior to the scheduled test date. [POP-85-01 #42 and #43, PSD IX.E.4, 40 CFR §60.8(d)]
- 3. Performance tests shall be conducted under such conditions as the Administrator or the APCO shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test. Upon prior written request and supporting justification, EPA and the APCO may waive a specific annual test and/or allow for testing to be done at less than the maximum operating capacity. Such requests must be submitted (Attn: A-3-3) no later than sixty (60) days prior to the annual test date. [POP-85-01 #41, PSD IX.E.2, 40 CFR §60.8(c)]
- 4. Each performance test for particulate matter shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. The annual compliance test for particulate matter shall include at lease one run during a grate cleaning event. The test run performed during the grate cleaning event shall include as mush of the grate cleaning event as possible. The average pounds per hour of particulate matter emissions shall be calculated by the following equation rather than the arithmetic average as outlined in 40 CFR §60.8(f).

$$E = (E_{SGR} * (A + B) * S)/(A * R) + E_{NOGR} * [((R - S)/R) - ((B * S)/(A * R))]$$

where:

E = average pounds of particulate matter per hour [lb/hr] $<math>E_{SGR} = average E of sample(s) containing grate cleaning [lb/hr]$

 E_{NOGR} = average E of sample(s) with no grate cleaning [lb/hr]

A = hours of grate cleaning during sample [hr]

B = hours of grate cleaning during samples containing grate cleaning [hr]

R = average hours of operation per 24 hour period [hr]

S = average hours of grate cleaning per 24 hour period [hr]

In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon written approval from the Administrator and APCO, be determined using the arithmetic mean of the results of the two other runs. [PSD IX.E.5, 40 CFR §60.8(f)]

VII. RECORDKEEPING REQUIREMENTS

A. General Requirements

- 1. In addition to any other recordkeeping, records shall be maintained of all monitoring and support information required by any applicable federal requirement, including:
 - a) Date, place, and time of sampling; and,
 - b) The date(s) analyses were performed; and,
 - c) The company or entity that performed the analyses; and,
 - d) The analytical techniques or methods used; and,
 - e) Operating conditions at the time of sampling; and,
 - f) Results of the analysis. [Rule 1101 §6.2.6.1, 40 CFR §70.6(a)(3)(ii)]
- 2. Records shall be retained for all required monitoring data and support information for a period of at least five (5) years from the date of sample collection, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [POP-85-01 #40, PSD IX.F.5, Rule 1101 §6.2.6.2, 40 CFR §70.6(a)(3)(ii))(B)]

B. Recordkeeping for S-1 Operations

- 1. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]
- 2. The Permittee shall maintain records of continuous monitoring for opacity, NOx, and CO. [POP-85-01 #40 CFR §60.49.b]
- 3. The permittee shall maintain a log of the temperature, pressure and mass flow rate of steam produced. These records shall be maintained by the permittee in a convenient location for a period of not less than five (5) years and shall be available for inspection as specified in Condition V. [PSD IX.B]

C. Diesel Powered Equipment (S-3 and S-6)

1. The permittee shall maintain supplier certificates and delivery records that demonstrate that diesel fuel deliveries comply with the low sulfur content requirements of this permit. [POP-89-02, POP-98-04]

D. Greenwaste Operations (S-6)

1. The permit holder shall maintain records of all green-waste processed by equipment operated under this permit on a daily basis. Such records shall include the type of waste processed and weight of the waste as received. The permit holder shall record the daily hours of operation of each internal combustion engine operated under this permit. All records shall be maintained onsite for a period of five (5) years and shall be made available for inspection by the APCO, or his designated representative, upon request. [POP-98-04 #29]

VIII. REPORTING REQUIREMENTS

A. General Requirements for Monitoring Reports

- 1. In addition to any other reporting requirements contained in this permit the permittee shall comply with all of the following requirements:
 - a). The APCO shall be notified within two (2) hours of discovery if any CEM at the facility is rendered inoperative; and, [POP-85-01 #39]
 - b) All reports of a deviation from permit requirements shall identify the probable cause of the deviation and any preventative or corrective action taken; and,
 - c) A progress report shall be made on a compliance schedule at least semi-annually and shall include: 1) the date when compliance will be achieved, 2) an explanation of why compliance was not, or will not be, achieved by the scheduled date, and 3) a log of any preventative or corrective action taken; and,
 - d) Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [Rule 1101 §VI.7, 40 CFR §70.5(d)]

B. Notification and Reporting of Emergency

- 1. Any deviation from permit requirements, including or that attributable to upset conditions or malfunction of continuous monitoring equipment shall be reported to the APCO within 2-hours of the discovery of any emission exceedance or breakdown condition. [POP-85-01 #39, Rule 275.A, 40 CFR §70.6(a)(3)(iii)(B)]
- 2. In the event of a breakdown, malfunction, or other emergency the permittee shall submit to the APCO and the Regional Administrator, within two (2) weeks of the emergency event, properly signed, contemporaneous operating logs, or other relevant evidence that demonstrates: [Rule 275, Rule 1101 §6.2.12.2]
 - a) An emergency occurred; and,
 - b) The probable cause(s) of the emergency can be identified; and,
 - c) The facility was being properly operated at the time of the emergency; and,
 - d) All steps were taken to minimize the emissions resulting from the emergency event; and
 - e) Within two working days of the emergency event, the permittee provided the APCO with a description of the emergency and any mitigating or corrective action taken.
 - f) In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

C. Boiler (S-1) Excess Emissions and Monitoring Report

- 1. The permittee shall submit a written report of the results of any performance source test to the U.S. EPA and the APCO within 60 days following testing. [POP-85-01 #45, PSD IX.E.2]
- 2. The permittee shall submit an excess emissions and monitoring systems performance report for any federal fiscal quarter during which there are excess emissions, or a summary report shall be submitted semiannually if there are no excess emissions. Written reports of excess emissions shall include the following information:

- a) The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period. [40 CFR §60.7(c)(1)]
- b) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted. [40 CFR §60.7(c)(2)]
- c) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. [40 CFR §60.7(c)(3)]
- d) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR §60.7(c)(4)]
- 3. The excess emissions reports shall contain the information and be in the format shown in figure 1 of 40 CFR Part 60.7(d) unless otherwise approved by APCO and EPA. The summary report form shall be submitted for emissions of NOx, CO and opacity. [40 CFR §60.7(d)]
- 4. If the total duration of excess emissions for the reporting period is less than one (1) percent of the total operating time for the reporting period and continuous emission monitoring system (CEMS) downtime for the reporting period is less than five (5) percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report need not be submitted unless requested by the APCO or the Regional Administrator. [40 CFR §60.7(d)(1)]
- 5. If the total duration of excess emissions for the reporting period is one (1) percent or greater of the total operating time for the reporting period or the total CEMS downtime for the reporting period is five (5) percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report shall both be submitted. [40 CFR §60.7(d)(2)]
- 6. The excess emissions report shall be postmarked by the 30th day following the end of each federal fiscal guarter and submitted to EPA (Attn: A-3-3) and the APCO. [40 CFR §60.7(d)(3)]

D. Annual Compliance Certification

- 1. The responsible official shall submit a compliance certification to the U.S. EPA Attention Air-3 and the APCO every 12 months unless required more frequently by an applicable requirement. [Rule 1101 §6.2.14.1]
- 2. The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition. [Rule 1101 §6.2.14.2]
- 3. The compliance certification shall include a statement of the compliance status and method(s) used to determine compliance for the current time period and over the entire reporting period. [Rule 1101 §6.2.14.3]
- 4. The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [Rule 1101 §6.2.14.4]

IX. COMPLIANCE

A. Compliance With Permit Requirements

- 1. The permittee shall continue to comply with all permit conditions with which it is in compliance. [Rule 1101 §6.2.11.1, 40 CFR §70.5(c)(A)]
- 2. The permittee shall comply, on a timely basis, with all applicable federal requirements that will become effective during the term of this permit. [Rule 1101 §6.2.9.2, 40 CFR §70.5(c)(8)(iii)(B) & §70.6(c)(3)]